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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/877,923	06/08/2001	Eckard Deichsel	3081.25US01	2515

7590 01/15/2004

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EXAMINER	
MENEFEE, JAMES A	

ART UNIT	PAPER NUMBER
2828	

DATE MAILED: 01/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action	Application No.	Applicant(s)	
	09/877,923	DEICHSEL ET AL.	
	Examiner	Art Unit	
	James A. Menefee	2828	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 08 December 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.

b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.

2. ☐ The proposed amendment(s) will not be entered because:

   (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);

   (b) ☐ they raise the issue of new matter (see Note below);

   (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

   (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____.

3. ☒ Applicant's reply has overcome the following rejection(s): 35 U.S.C. § 112 rejection.

4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

5. ☒ The a)☐ affidavit, b)☐ exhibit, or c)☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: *see attached*.

6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

7. ☒ For purposes of Appeal, the proposed amendment(s) a)☐ will not be entered or b)☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:

   Claim(s) allowed: _____.

   Claim(s) objected to: _____.

   Claim(s) rejected: *1-5 and 7-26 using same prior art as in the Final Rejection*.

   Claim(s) withdrawn from consideration: _____.

8. ☐ The drawing correction filed on _____ is a)☐ approved or b)☐ disapproved by the Examiner.

9. ☐ Note the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s). _____.

10. ☒ Other: *See Continuation Sheet*

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Continuation of 10. Other: The objection to claims 11 and 19 is withdrawn; Also note the attached PTO-892..

ATTACHMENT TO ADVISORY ACTION

Response to Arguments

Applicant's arguments filed 12/8/2003 have been fully considered but they are not fully persuasive. The amendment is made only to make a grammatical correction, and thus the after-final amendment will be entered. The arguments are persuasive in regards to the claim objection and the 35 U.S.C. § 112 rejections, but not in regard to the 35 U.S.C. § 102(e) rejection.

Applicants first argue against the objection to claims 11 and 19. The argument is persuasive and the objection is withdrawn. However, even though the objection is withdrawn, the claims remain rejected for the same reasons, i.e. the claims are not given patentable weight as being drawn to the process of making the device. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Thus, since the structural limitations of the claims are the same as that of the prior art, the method of forming the device, the temperature at which the particular layers are grown, are not germane to the patentability of the device itself and thus is not given weight.

Applicant's arguments with regard to the 35 U.S.C. § 112 rejections are also persuasive and the rejection withdrawn. The applicant's cite to MPEP 2173.05(h)III persuades the Examiner that the "optional" limitation is properly used, and absent other ambiguities the limitation is proper under 35 U.S.C. § 112, thus this rejection is withdrawn.

Applicant's arguments with regard to the 35 U.S.C. § 102(e) rejection are not persuasive. Applicant's arguments incorporate the arguments from the amendment filed 8/22/2003. The Examiner responded to these arguments in the Final Rejection mailed 10/6/2003, and this response is incorporated by reference.

Note that Kolbas et al. (IEEE J. of Quant. Elec. Vol. 24 no. 8) is cited herein on PTO-892 in order to make it of record in the file. Applicant previously submitted this reference in response to the rejections, but it was not listed on an Information Disclosure Statement and thus was not officially made of record; it is cited on the 892 in order to officially make it of record in the file.

The Examiner maintains that the quantum well layer of Weingarten is strained. The applicant contends that the "Examiner has not provided a basis to support the proposition that the quantum well in the Weingarten patent is necessarily strained." "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original).

Here, Weingarten is silent as to whether the layer is strained or unstrained. Thus, as correctly noted by the applicant, the use of a strained layer can only be shown by inherency. Applicant cited *Ex parte Levy* to show that the use of inherency must be based on fact or technical reasoning to reasonably support that the layer being strained necessarily flows from the teachings of the applied art. Kolbas et al. teaches very similar layers and discloses them as strained. See Fig. 2 and p. 1606 col. 1. This reasonably supports that if Kolbas's layer is strained, then Weingarten's layer that is almost identical in composition would also be strained.

The Examiner believes that the showing of inherency is sufficient to support the rejection. Once such as showing is made presenting evidence or reasoning tending to show inherency, the burden shifts to the applicant to prove that the inherent characteristics are not present. *In re Fitzgerald*, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980) (quoting *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977)).

Even assuming *arguendo* that Weingarten does not inherently disclose a strained quantum well layer, this alone is not sufficient for patentability. Strained quantum well layers are exceedingly common in the art, and one skilled in the art would look to any of numerous references including strained quantum well layers to provide motivation for using a strained layer instead of an unstrained layer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Menefee whose telephone number is (703) 272-1944. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on (703) 272-1941. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

JM
January 4, 2004

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